

IN THE CLAIMS:

The following is a complete listing of claims in this application.

Claims 1-13 (canceled).

14. (new) A procedure for squeezing off and sealing a metal tube, comprising the steps of:

positioning and fixing the tube between a sonotrode and associated counter electrode of an ultrasonic welding device;

determining a characteristic variable of the tube with the tube being fixed between the sonotrode and counter electrode;

retrieving stored welding parameters on the basis of the characteristic variable; and

activating the sonotrode and moving the sonotrode and counter electrode in relation to each other for squeezing off and sealing the tube.

15. (new) A procedure pursuant to claim 14, wherein a distance between the sonotrode and counter electrode with the tube fixed between them is determined as a characteristic variable.

16. (new) A procedure pursuant to claim 14, wherein electrical conductivity of the tube is determined as a characteristic variable.

17. (new) A procedure pursuant to claim 14, wherein wall thickness of the tube is determined as a characteristic variable.

18. (new) A procedure pursuant to claim 14, wherein deformation level of the tube is determined as a characteristic variable.

19. (new) A procedure pursuant to claim 18, wherein for determining the deformation level, pressure to be applied for displacing the sonotrode and counter electrode towards each

other across a defined distance is measured.

20. (new) A procedure pursuant to claim 19, wherein during the displacement of the sonotrode toward the counter electrode, the sonotrode is activated by means of ultrasound.

21. (new) A procedure pursuant to claim 17, wherein the wall thickness is determined by means of ultrasound.

22. (new) A procedure pursuant to claim 14, wherein multiple characteristic variables are determined and, based thereon, stored welding parameters are retrieved.

23. (new) A procedure pursuant to claim 14, wherein following the consolidation and sealing of the tube, one section of the tube is cut.

24. (currently amended) A procedure pursuant to claim 14, wherein for determining welding parameters to be stored, at least one control curve taking into consideration temporal change of energy, force and/or power of the sonotrode subjected to ultrasonic vibration is recorded during the determination of characteristic variables, the control curves are compared to actual curves of tubes with unknown diameter and/or unknown wall thickness to be squeezed off and sealed, and, while taking into consideration potentially defined tolerances in event of an agreement between the actual curves and at least one said control curve, the welding parameters associated with the at least one said control curve are used for squeezing off and welding the tube.

25. (new) A procedure pursuant to claim 24, wherein the actual curve is compared to the at least one control curve expanded by a tolerance range.

26. (new) A procedure pursuant to claim 24, wherein the control curve is associated with a welding parameters which is determined for squeezing off and welding standard tubes used during the recordation of the control curves, an actual curve is recorded for welding a tube with unknown size, and the

actual curve is fitted into one of several control curves and thus, the tube with unknown size is squeezed off and welded on the basis of welding parameters associated with a corresponding control curve.

27. (new) A procedure pursuant to claim 24, wherein at least one of diameter and wall thickness of standard tubes to be squeezed off and sealed is determined as a characteristic variable.

28. (new) A procedure pursuant to claim 26, wherein the welding parameter associated with the control curve is least one of as pressure, welding duration and energy input.